

The U.S., for example, imports more meat than it exports; in 1977, it exported about \$600 billion, but imported about \$1.5 billion. During 1971, when a previous famine wracked Africa, 56 million pounds of fish were exported from the hardest hit regions. In Malaysia, despite a substantial increase in the total catch between 1967 and 1975, "per capita fish consumption dropped by 30 percent. In Thailand and the Philippines, seafood exports have also increased rapidly while local consumption has declined."

But in many parts of the rich, "Haber concludes, "Tensions in many parts of the world will increase." And increasing exports, which is the statist strategy, will only exacerbate the problem. "Africa offers a striking illustration," according to Haber. "Media accounts portray the continent's food problem as a blend of drought, disease, overpopulation, political instability and inefficient peasant farming. The prevailing belief is that Africa is a food aid. In fact it is a survival strategy of crops consumed daily in the advanced nations—meat, vegetables, tea, coffee, cocoa, sugar—and even of fresh flowers for the dinner table. Increased exports will profit international agribusiness, which dominates Third World agricultural production, and will maintain the large landholders there, but it won't feed hungry Africans."

The strategy of self-sufficiency, while a "more promising" one, he says, "is not feasible." "Self-sufficiency in less developed nations can't happen until it is practiced by the food system. The question is: What can poor countries do to become self-sufficient? requires a small, but critical change to become self-sufficient?"

What can rich countries do to become self-sufficient?

In some countries the lack of land, unemployment and plummeting wages have reversed this strategy, according to Harrison. Bali, Thailand, Indonesia and Egypt have seen significant drops in their growth rate due to a combination of landlessness,

unemployment and vigorous family planning programs. Large numbers of people in these countries do not appear to be having significant, the causal factors do not appear to be direct birth control programs so much as a shift in resources toward the poorest groups. In countries such as Sri Lanka, Singapore, Hong Kong, Taiwan, Egypt, Argentina, Uruguay, Costa Rica and Cuba, "most have, or once had, some national policies favoring the low-income groups, whereas in countries such as Brazil, Venezuela, the Philippines and Mexico, the welfare policies have been declining significantly."

While I was proofing this text, a review of a feminist book on population, *Reproduction Rights and Wrongs* (Bosny Harman, Harper & Row, 1987), came to my attention. According to reviewer Eleanor J. Bader, this "feminist critique of population control attacks the banks, governments, and world agencies which perpetuate the myth that only by reducing population can the world's problems be solved. Bader, like so many others, shows that this notion of population control puts the cart before the horse. The question of population can only be addressed, she argues, by improving maternal and child primary health care, along with economic improvements in people's lives through social transformation and genuine land reform, and social improvements in the position of women. The book will decide when the gross national product per capita is low," when such coercive measures of population control pursued by the U.S. and other international agencies and private foundations with Third World governments, on the other hand, undermine the health of women and children and ultimately exacerbate the problem. Even liberal reformers that claim to deal with the situation of the people affected by them and ultimately bound to fail. (See "A Feminist Analysis of Population Control," *The Guardian*, September 16, 1987.)



Hansrich Kley, *Paradise Gave*

The Fifth Estate

The Fifth Estate newspaper (ISSN No. 0015-0800) is published quarterly at 4622 Second Ave., Detroit MI 48202 USA. Phone (313) 871-6200. Subscriptions: \$5.00 per year; \$7.00 per year foreign including Canada. Second class postage paid at Detroit, Michigan. Postmaster: Send address changes to Fifth Estate, P.O. Box 02548, Detroit MI 48202.



About this issue

This special issue of the Fifth Estate is a collaboration between the Detroit staff and our friend and comrade, Freddie Bare in San Francisco. The essay on deep ecology was written and edited here, but with invaluable suggestions and criticism from several people around the country. The typsetting, graphic selection and layout were done by Freddie, and for this herculean effort, as well as for her patience, her suggestions and her eye for graphically attractive design, she has our immense gratitude.



This issue's appearance as a stitched pamphlet is a departure from our usual tabloid format and was decided upon as a design and layout experiment. Several years ago we tried a full-page size, common to daily papers for the Fifth Estate. Although we found it to be easier and faster to prepare, our readers didn't like it. We've always retained the smaller pamphlet format because of the doubling of the work involved in laying out half-size pages, but given the single-essay character of this special issue, we thought we'd give it a try. It does give more the appearance of permanence over the tabloid format, which is usually only retained while an issue is current, so it's perhaps more appropriate to our status as a journal rather than a newspaper.

We are pleased enough with it to want to do other special issues, particularly a series of reprints we have been considering of past Fifth Estate articles. Although we officially have a quarterly publishing schedule, we really have only been putting out about three issues a year because much of our time is devoted to a variety of other projects and interests. A reprint series could fill that extra gap and at the same time put in compilation form some of the material we feel shouldn't just rest in mouldy piles of old newspapers. We are thinking of issues on technology, war, Central America and primitive society. Suggestions for the pamphlet series are very welcome.

A NOTE ON DISTRIBUTION AND PRICE: Since this is a special issue, we would ask that distributors maintain both this and our Summer edition as current until the appearance of our next regular issue. And, to further confuse things, keep the special issue for distribution until the subsequent issue is replaced by our Spring edition. As of this issue we are raising our price to \$7.75 per copy due to the rapidly increasing prices for our rent, materials and printing bills. Our subscription prices will remain the same; distributors will be contacted about the increase. Also, if you are interested in distributing this special issue, please send \$7.75 for 1-4 issues; \$5.50 per five and over. If you would like to distribute the Fifth Estate each issue, please write for terms.

By the way, this issue marks the 22nd year of continuous publishing for this project and we want to thank everyone for the support that has made it possible.

The Fifth Estate

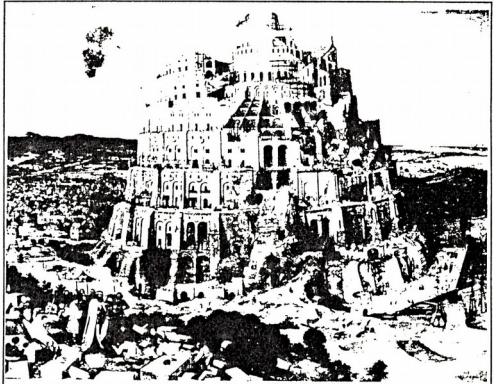
HOW DEEP IS DEEP ECOLOGY—by George Bradford • INTRODUCTION •

For a number of years, the Fifth Estate has been writing about the crisis of Western civilization and its industrial/technological plague. At the same time we have been profoundly interested in primitivism and the cultures of earth-based peoples, realizing that their demise came with the subjugation of nature by the advances of the civilized world. The view that our planet faces a grave, man-made ecological threat is certainly not unique to us, and the last few years have seen the emergence of an international green or ecology phenomenon which demands an end to environmental abuse and seeks a reconciliation between humanity and nature.

The development of this movement was inevitable considering the severity of the crisis we face. It is only surprising that the movement is not stronger and more widespread, for it would seem that the threat to the earth would be the immediate concern of us all. While the green and ecology movements have no single definition, their most prominent and visible sector is the Green parties of Western

Europe and their pale reflections in North America which have already become compromised within the electoral system. Here in North America, mainstream environmental groups often fight valiant but pitifully inadequate reform battles while others immerse themselves in the latest technology of "computer networking" or "alternative technology."

However, there is a more radical and hopefully growing sector of the ecology perspective, one which the Fifth Estate adheres to and attempts to encourage. It is anti-industrial, placing culpability for the devastation and exploitation of the earth directly at the door of capitalism's industrial system. It is also anti-state and anti-authoritarian, linking the questions of political power, organized state control and the denial of individual freedom to the self-destructive exploitation of the earth and its resources. It seeks social models or examples in primitive peoples in a desperate search for a reconciliation with nature and a renewal of authentic human community. There is also a strong feminist element involved, stemming from the



Bouquet, *The Tower of Babel*

realization that just as man and the patriarchy dominates and exploits the earth (our mother), so they treat women and others.

The following essay by George Bradford does not pretend to be a critique or analysis of the broad-based ecology or green movement though it does have implications for the movement as a whole. Instead, it focuses on specific elements within the current which defines itself as the deep ecology or radical environmental perspective. Deep ecology announces itself as anti-industrial and often as anti-civilization, challenging the moderate environmental and political groups which take the character of this society as a given. However, the inability of deep ecology to come to grips with the question of the capitalist political economy leaves it filled with problems as well as uncertainties about its future direction.

Our decision to put forth these criticisms speaks both to our realization of the centrality of the ecological crisis for this era and to the fact that the question of the ultimate viability of the industrial capitalist system and its social relationships is being moved onto the agenda for public debate. Deep ecology's generalized inability or refusal to place the environmental crisis within its social, economic and political context not only threatens to produce dangerous currents within it as a philosophy or ideology, but also threatens any potential it may have to fully understand and combat the problems we all face.

After critically examining the philosophical and social foundations of deep ecology as expressed by its exponents, the essay then moves on to deeply disturbing problems with the Earth First! organization which publishes what it describes as "the radical environmental journal." We are focusing on Earth First! not only because of its prominence in carrying out numerous admirable direct action defenses of the wilderness (particularly in the West and Southwest), but also because it is the main organization which acts out the social and environmental critiques contained within deep ecology thought. It is Earth First! which in many ways confirms for us the inadequacies Bradford perceives in its philosophical foundations.

Earth First! also looms large in our schema since it poses itself as a model for others beginning to take action in defense of the environment and has attracted many people within the anti-authoritarian movement with its commitment to militant confrontation and its ambiguous utilization of anarchist concepts. We had initially written favorably about Earth First! in this newspaper (see *Fifth Estate*, Summer 1986) and looked forward to collaborating with them; however, with time we became dismayed by comments appearing in their publication concerning the questions of over-population, AIDS, immigration, and patriotism. Further, a purposely fostered macho and "red-neck" image has created an organizational style that runs counter to the implied values of harmony with the earth.

The short excerpt from the newsletter *Alien-Nation* following the main essay suggests from what is reported that Earth First! has begun to function in classic political gang style with defensive and aggressive reactions to any perceived threat to its leadership core on organizational orthodoxy. In the latest issue of *Earth First!* newspaper, it has been announced that in their next edition they will answer their "leftist" critics. It is disheartening that they would characterize those who would challenge their

perspectives as constituting a moribund and irrelevant left rather than people anguishing over the same problems as they.

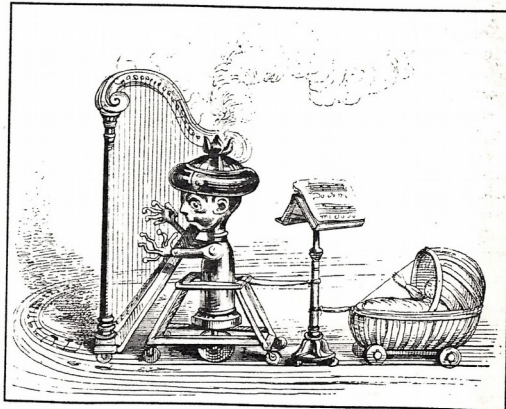
The radical, anti-industrial wing of the ecology movement is in its infancy, and we feel it is a necessity that no body of thought, nor certainly any organization, be immune to searching criticism and rigorous critique. We expect and have received no less from our critics over the years, and for those who have said they fear we will be "throwing the baby out with the bath water," let them be assured that our intent is to strengthen and extend the anti-industrial critique, not to weaken or diminish it. Finally, Earth First! should be aware that if anything typifies the tiny leftist political gangs that it slurs its critics as being, it is that very process of ideological orthodoxy and ossification, authoritarianism, cult-of-leaders, and insulation that appears to be occurring within Earth First! itself. By copywriting and colonizing the generalized turn away from industrialism and the desire for a reconciliation with nature as their own property, they are racketizing what we are all striving for and thus undermining our possibilities for attaining it.

Rather than circling the wagon trains and pulling their cowboy hats down tightly over their foreheads, we would prefer that those who espouse deep ecology and those within the Earth First! group consider this essay as a harsh but comradely criticism. We view industrialism and capitalism as our enemy, not deep ecology, and we hope its proponents can respond in a similar spirit. We have been heartened and have learned much from the examples of their resolute determination to stop the development of the wilderness. In return, we don't think it unreasonable that they might learn something from what we have to say as well.

We welcome unsolicited letter-length replies to our views. However, if you wish to reply in length, please check with us first.

—The Fifth Estate Staff

Note: In the text of the essay, Earth First!, the organization, is referred to in regular type; when the publication *Earth First!* is mentioned, it is italicized.



J.J. Grandeville



Bruegel, *The Parable of the Blind*

HOW DEEP IS DEEP ECOLOGY? A CHALLENGE TO RADICAL ENVIRONMENTALISM

"In every perception of nature there is actually present the whole of society."—Theodor Adorno, *Aesthetic Theory*

"The human race could go extinct, and I, for one, would not shed any tears." —Dave Foreman, leader of Earth First!, a "deep ecology" environmental organization

Books and publications reviewed in this essay:

Overshoot: The Ecological Basis of Revolutionary Change, by William R. Catton, Jr., University of Illinois Press, Urbana, 1980.

Deep Ecology: Living As If Nature Mattered, by Bill Devall and George Sessions, Gibbs M. Smith, Inc./ Peregrine Smith Books, Salt Lake City, 1985.

Deep Ecology, edited by Michael Tobias, Avant Books, San Diego, 1985.

Food First: Beyond the Myth of Scarcity, Revised and updated, by Frances Moore Lappe and Joseph Collins, Ballantine Books, New York, 1978; Institute for Food and Development Policy, 145 Ninth Street, San Francisco, CA 94103.

Inside the Third World, by Paul Harrison, Penguin Books, New York, 1982.

Earth First!, published eight times a year by the Earth First! movement, from P.O. Box 5871, Tucson, AZ 85703.

Ecology and the Necessity for Social Critique

The present ruination of the earth in the wake of widening industrial plagues is a situation which appears to have no meaningful or comparable precedent. Mass extinctions of

species, industrial contamination, runaway development, war, starvation and megatechnic catastrophes have led to a sense of deep disquiet and mounting terror about the fate of the planet and all life. There is also a growing recognition that the environmental crisis is the crisis of a civilization destructive in its essence to nature and humanity.

"All thinking worthy of the name," writes Lewis Mumford in *The Myth of the Machine*, "must become ecological." Indeed, ecology, the word that sees nature as a household, has become a household word. Envisioning the world as an interlocking, organic whole, ecology attempts to transcend mechanistic, fragmentary and instrumental perspectives. But ecology as a scientific discipline is itself fragmentary; the notion of nature as a system can be as mechanistic and instrumental as previous scientific modes employed by industrial civilization, to which the contemporary convergence of cybernetics, systems theory and biotechnology attests.

Ecology as science speculates, often with profound insight, about nature's movement and the impact of human activity on it. But it is ambiguous, or silent, about the social context that generates those activities and how it might change. In and of itself, ecology offers no social critique, so where critique flows directly from ecological discourse, subsuming the complexities of the social into a picture of undifferentiated humanity as a species, it goes astray and is frequently vapid. Often it is employed only to justify different political ideologies, masking social conflicts in pseudoscientific generalizations. Social Darwinism and its Malthusian legitimization of capital accumulation and human immiseration during the nineteenth century is a trenchant example of the ideological utilization of scientific discourse—an example which unfortunately remains, like all fragmentary ideologies in the modern world, to plague us today.



organized deep ecology action movement has appeared, with a newspaper and many local chapters and contacts, as well as its own myths, history, intellectual luminaries, and militant chieftains.

This group, Earth First!, was founded in the early 1980s as a radical environmental alternative to the mainstream organizations, "a true Earth-radical group" that saw wilderness preservation as its keystone; "in any decision, consideration for the health of the Earth must come first," wrote a founder.



Dave Foreman, in the October 1981 *Progressive* magazine. Wilderness preservation means not only to protect remaining wilderness but to "withdraw huge areas as inviolate natural sanctuaries from the depredations of modern industry and technology." Earth First! claims to be nonhierarchical, nonbureaucratic and decentralized; many of its adherents consider themselves anarchists. It practices and encourages an explicit luddite form of direct action against the machinery of developers, and favors tree spiking and other tactics to stop deforestation by lumber corporations, all described as "monkeywrenching," after Edward Abbey's novel about eco-saboteurs, *The Monkeywrench Gang*. They have done much to oppose development projects and protect national parks, using demonstrations, guerrilla theatre and civil disobedience at development sites and in national parks. Their newspaper is also an excellent source for information on rainforest destruction, battles over wilderness and old growth

forests, defense of habitat for bears and other species—in short, for environmental confrontations all over the world. They have definitely played a positive and creative role in encouraging and publicizing a more intransigent environmentalism that sees intrinsic worth in wilderness and in willing to go from letter-writing and lobbying to blockades in order to fight for it. In *Earth First!* there is little information on struggles against toxic wastes or megatechnic development in the cities, or of antimilitarist struggles. Starting from what they call deep ecological principles, they see their efforts at wilderness preservation as central. Does deep ecology represent an emergent paradigm for an earth-based culture? Is it the coherent culmination of the anti-industrial tradition?

"Biocentrism" Versus "Anthropocentrism"

Deep ecology as a perspective was originated by Norwegian writer Arne Naess in the 1970's and remains an eclectic and ambiguous current. Only two books dealing explicitly with the subject have yet appeared—both, revealingly, anthologies containing a mixture of sometimes complementary, sometimes contradictory writings. *Deep Ecology* (Avant Books, 1984), edited by Michael Tobias, is a

collection of poetry and essays from writers like William Catton, George Sessions, Murray Bookchin and Garrett Hardin. The essayists are widely divergent, the poetry a mix of general nature and ecological themes. Another collection, *Deep Ecology: Living As If Nature Mattered* (Peregrine Smith Books, 1985), is written and edited by George Sessions and Bill Devall and is probably the more complete book, made up of essays by the editors and quotes from a myriad of sources. The Tobias edition, nevertheless, has several useful essays for understanding the perspective (including a long philosophical essay by Bookchin anticipating some of the problems in it).

It was Arne Naess who in 1973 described deep ecology as an attempt "to ask deeper questions." This "ecosophy," as he called it, consciously shifted "from science to wisdom" by addressing humanity's relationship with nature, since "ecology as a science does not ask what kind of society would be best for maintaining a particular ecosystem." Sessions sees it as a "new philosophy of nature," and one text from a green network, quoted in his anthology, describes such ecological consciousness as "a proper understanding of the purposes and workings of nature" that does not "impose an ideology on it." Deep ecology seeks to transform society based on this understanding.



The philosophy has as its basic premises the interrelatedness of all life, a biotic equality for all organisms (including those for which human beings have no "use" or which might even be harmful to us), and a rejection of "anthropocentrism" (the belief that human beings are separate from, superior to, and more important than the rest of nature). Anthropocentrism, they feel, underlies human arrogance towards and exploitation of the natural world. They call for a new "land ethic," after environmentalist writer Aldo Leopold, not only to restore a harmonious balance in nature, but to answer a fundamental human need to experience untrammelled wilderness and to live in harmony with the planet. Many of these concerns are not unique to deep ecology; the *Fifth Estate*, for example, has made such a reconciliation with the natural world a central focus for the last decade.

The appeal of a biocentric orientation and its subsequent critique of the conquest of nature that has characterized all state civilizations (particularly western civilization and capitalism) is undeniable. Seeing human beings as members of a biotic community may at least suggest the question of "what kind of society would be the best" for living in harmony with the earth. This, of course, is the vision of primal peoples, the animist mutualism and rootedness that is in everyone's past. As Seathe, of the Suguamish people, said, "The earth does not belong to man. Man belongs to the earth. This we know. All things are connected as the blood that unites a family." The rejection of "human chauvinism," as deep ecologist John Seed puts it, is a rediscovery of this view. "I am protecting the rainforest." Seed writes, "develops to 'I am part of the rainforest protecting myself. I am that part of the rain forest recently emerged into thinking.'"

The wisdom of this vision is clear; the present apocalypse that we are experiencing is the culmination of the hubris which wants to bring all of nature under human control, both through rapacious devastation or "benign" meddling. When one considers how people live in this high energy consumption society, with its hatred and contempt for life and nature, with its demonic development projects that gouge the earth and destroy myriad life forms to create the empty, alienated civilization of computerized nihilism, even the response of misanthropy is understandable—such as naturalist John Muir's comment that "if a war of races should occur between the wild beasts and Lord Man, I would be tempted to sympathize with the bears..." Deep ecology claims that that time has come.

As poetic commentary, Muir's misanthropy is commendable. But it must be remembered that human beings are animals too, and the same forces that are destroying the bears have destroyed many human beings and cultures, and are undermining all human life as well. While its rejection of biotic hierarchy, and "man" as the pinnacle and lord of creation (the model for all hierarchies), is crucial to a reconciliation with the natural world, the deep ecological notion of anthropocentrism is itself mired in ideology.

Positing itself as a critique of "humanism" (defined rather simplistically as the ideology of human superiority and the legitimacy to exploit nature for human purposes), deep ecology claims to be a perspective taken from outside human discourse and politics, from the point of view of nature as a whole. Of course, it is a problematic claim, to say the least,

since deep ecologists have developed a viewpoint based on human, socially-generated and historically-evolved insights into nature, in order to design an orientation toward human society. At any rate, any vision of nature and humanity's place in it that is the product of human discourse is by definition going to be to some degree "anthropocentric," imposing as it does a human, symbolic discourse on the non-human.

The deep ecologists, for example, reject other forms of environmentalism such as technocratic resource conservation, as anthropocentric because they are framed in terms of utility to human beings. And criticizing animal liberation, Sessions and Devall argue that it simply extends moral and political categories of legal rights from the human world to nature, thus furthering the human conquest of nature.

But the deep ecological "intuition...that all things in this biosphere have an equal right to live and blossom" is the same projection of human social-political categories onto nature—a legalistic and bourgeois-humanist anthropocentrism itself. Ecology confirms the animist vision of interrelatedness, but when expressed in the ideological terms of this society, it denatures and colonizes animism, reducing it to a kind of economics or juridical, legal formalism. Neither animals nor primal peoples recognized or conferred abstract legal rights, but lived in harmony and mutualism, including a mutualism of predation of other species to fulfill their needs and desires. Human subsistence was bound up with natural cycles and not in opposition to them; people did not envision an alienated "human versus nature" dualism (which, whether one takes "nature's side" or "humanity's," is an ideology of this civilization), but rather "humanized" nature by interacting mythically and symbolically with it.

When ecological "anti-humanism" (justly) rejects technocratic resource management, it does so for the wrong reasons. The dualism of its formulation takes the technocratic reduction of nature to resources for an undifferentiated species activity based on supposed biological need. While human beings and institutions that actively engage in the destruction of nature must be stopped by any means necessary and as soon as possible, it should not be automatically assumed that they are acting out the biological destiny of the species; that would be to take at face value the corporate and state rationalizations for exploitation ("we do it all for you"). This aberrant destructiveness (which has only occurred in the context of civilization) must be viewed as occurring within and answerable to a human social context that is not readily explained by ecological analysis.

Deep ecology collapses into ideology when it sees the pathological operationalism of industrial civilization as a species-generated problem (as the discussion of its Malthusian tenets will show), rather than as generated by social phenomena that must be studied in their own right. Concealing socially generated conflicts behind an ideology of "natural law," deep ecology contradictorily insists on and denies a unique position for human beings while neglecting the centrality of the social in environmental devastation. Consequently, it has no really "deep" critique of the state, empire, technology or capital, reducing the complex web of human relations to a simplistic, abstract, scientific caricature. Taking pains to defend every form of life from whales down to

even the extinct or near-extinct (unless the military labs have it) smallpox virus, only human beings are banished from creation for their depredations. Deep ecologists tend to forget that particularly in the long run preservation of wilderness and defense of natural integrity and diversity is essential to human survival also, that there is no isolated "intrinsic worth" but an interrelated dependency that includes us all.

The Problem of Human Intervention

Another confusion in the critique of anthropocentrism is the rejection of human stewardship of nature.

The notion of intervention is anthropocentric in their eyes; they associate it with genetic manipulation, scientific forestry management, and resource development (actually extraction) for "human needs." But they only offer an alternative form of management. As Sessions and Devall write, "Our first principal is to encourage agencies, legislators, property owners and managers to consider flowing with rather than forcing natural resources." They call for "interim management" and technological intervention. This ambiguity (and ingenueness about agencies legislators and the rest) informs this entire discussion. Their description of policy decisions "based on sound ecological principles" sounds like a picture of *present* agencies and their self-justifications. The detailed wilderness proposals in *Earth First!* are also an example of a notion of human stewardship.

And despite their lack of sympathy for mass technics, they have no critique of technology as a system or of its relation to capitalist institutions. So while humans "have no right to reduce richness and diversity except to satisfy vital needs" (a rather ambiguous qualification), snowmobiles are deemed "necessary today to satisfy vital needs" of northern peoples such as Eskimos. So, in with the snowmobiles must slip the industrial apparatus and petroleum-based energy economy that are necessary to produce and use them. In fact, they argue, culture itself "requires advanced technology," so we end up with a somehow "greened" version of the present world, with industrialism and a technicized culture intact—presumably with those quaint native dances on television to preserve "diversity."



J.J. Grandville

Capitalist institutions are barely looked at as the major perpetrators of environmental devastation they are, even though the authors do recognize "the possible destruction of up to twenty-five percent of all species on Earth due to 'business-as-usual' economic growth and development during the next forty to sixty years." Speaking of the unintended consequences of technology, they refer to the agricultural crisis in California's Central Valley, where agribusiness, "which claims as its goal, 'feeding the hungry of the world,' is now creating an unhealthy, almost unfit environment for many human inhabitants of the Valley." Here again we see them taking corporate propaganda at face value, so technological short-sightedness and the "humanist" goal of "feeding the world" become the cause of the problem, rather than capitalist looting, which degrades the natural integrity of the valley not to feed people but to line the investors' pockets.

Deep ecology claims to ask deeper questions, but it does not recognize that this might require deeper analysis of human society. So the "nonideological" perspective ends up taking politics in a capitalist democracy for granted, recommending a rather confused kind of "direct action in politics or lobbying" (Sessions and Devall). For these deep ecology theorists, direct action is reduced to lobbying, and presumably to electoral politics (and when the environmentalists coozed up to then California governor Jerry Brown—how many trees got chopped with him in power?). Nowhere is this "working-within-the-system-ocentrism" questioned; it is simply assumed. We also get a fetish of nonviolence from Sessions and Devall, and a reformism that centers on seeking wilderness proposals and that wishes to "secure" nature "against degradation caused by

warfare and other hostile acts." Their naivete about securing nature against war is equalled by their simplistic view of international politics and the global economy, particularly the relations between industrial nations and the Third World.

The deep ecology perspective insists that everything is interrelated and sees this recognition as "subversive to an exploitive attitude and culture" (Sessions, in the Tobias anthology). But ecological reductionism fails to see the interrelatedness of the global corporate capitalist system and empire on the one hand, and environmental catastrophe on the other. This is far from subversive—despite the courageous and imaginative acts of many deep ecology militants who act against the tentacles of the planetary machine. In fact, the absence of a critique of capital is a real impediment to the generalization of authentic resistance to the exploitive-extractive empire which is presently devouring the earth because it mystifies the power relations of this society and squanders the possibility for linking the human victims of the machine in different sectors. Humans are the only beings, by the way, anthropocentrism or not, in a position to wage effective war against the empires and articulate an earth-based culture and a renewal of the land.²

"Malthus Was Right"

While deep ecologists may consider their perspective a "new paradigm," its Malthusian component is a commonplace of current ideology. In fact, "too many people" is one of the automatic responses made to any criticism of industrialism and the state: present numbers, we are always assured by ecologist, corporate developer, marxist and capitalist alike, could never be supported in a nonindustrial, sustainable society. Deep ecologists accept Malthus' proposition—that human population exponentially outstrips food production—as an essential support for their orientation (though it is certainly arguable that deep ecological thinking need not be Malthusian). It is taken for granted by most, and the slogan "Malthus Was Right" is even peddled as a bumpersticker by Earth First!. William J. Catton, Jr., who is quoted and published in both anthologies, is a leading modernizer of Malthus, and his book *Overshoot: The Ecological Basis for Revolutionary Change* (University of Illinois Press, 1980), has become a bible of sorts to the deep ecologists (even those, one would surmise, who haven't read it).

Population growth is certainly a cause for concern, perhaps even alarm. More than 900 million people are



Bruegel, Big Fish Eat Little Fish

presently malnourished or starving, and hunger spreads with the rising numbers. But Malthusian empiricism sees many hungry mouths and concludes that there are too many people and not enough resources to keep them alive. Scarcity and famine are thus explained as natural phenomena, inevitable, irrevocable, even benign. The pseudo-objectivity of scientific ideology is probably nowhere more profoundly expressed than in this Malthusian model. If, astonishingly, it is still necessary to argue against Malthus a century and a half later, it is because people know so little history.

Malthusian ideology emerged from the crucible of early industrialism and the immiseration and class conflict that came in its wake. As people were driven from their lands and craft workers were dispossessed by industry, masses of displaced people were shovelled into mills and mines, ground up to accumulate profit, and replaced by the hungry unemployed who followed them. As the commons (where rural people might grow their own food) were seized by wealthy landowners and sheep farmers, even the food and help to which they had traditionally been entitled during hard times in feudal society came under attack.

Malthus was only the most celebrated of the many pseudophilosophers who sanctioned class brutality by applying the economics of Adam Smith and its notion of a "natural" and self-regulating political economy to "natural law." The previously-held notion of a "just wage" had disappeared with classical economy; now the obligation to help the poor went with it. The surplus of workers that was so good for business and kept wages down came to be seen as a surplus in population. From his pulpit and in his essays, the good parson Thomas Malthus argued that people's animal power of multiplication would eventually run up against the constricting walls of scarcity, and concluded that feeding people who might otherwise starve would only lead them to procreate and increase generalized misery.

Against the rising revolutionary tide in France and the writings of utopian disciples of Rousseau, who attributed vice and misery to the corruption of human institutions and civilization, he posed "deeper seated causes of impurity," namely his "principle of population." In answer to the anarchist utopian William Godwin, who argued after Rousseau that in a society where people lived "in the midst of plenty and where all shared alike the bounties of nature," misery, oppression, servility and other vices would disappear, Malthus solemnly declared: "Man cannot live in the midst of plenty. All cannot share alike the bounties of nature." Contrary to the vision of humanity's natural state as one of "ease, happiness and comparative leisure," he argued, in the dour vein of Thomas Hobbes' vision of a state of war of all against all, that population was *always and everywhere* pressing against available food supply. So if subsistence should improve, population would rise with it, and pressure on the food supply would begin anew. For the sake of civilization and human progress, there was no alternative. "Man as he really is," he pronounced, "is inert, sluggish, and averse from labor, unless compelled by necessity." Therefore, instead of aiding the poor, "we should...court the return of the plague."

Malthus' numerical formula, which he worked out assiduously in his book, elaborately contrasting the abstract differential between geometric and arithmetical growth, was the

most compelling part of his proposition. But his argument was essentially circular and reflected in Newtonian fashion only a tendency or *capacity* for geometric population growth in a hypothetical situation in which no checks on population were present. Too many imponderable factors were involved in his calculations, and as Gertrude Himmelfarb wryly observed in her introduction to the 1960 edition of *On Population*, "The difficulties, as Malthus might have said, increased geometrically."³

If, as Jeremy Rifkin argues in his recent important, though flawed, book *Algeny*, "there is no neutral naturalism," it is clear that the acceptance of Malthus' proposition had little to do with its actual merits. Within its own terms and framework it was irrefutable, but Malthus' schema was as anthropocentric as it was ideological. Outside its social context it would have remained merely speculation. As it was, it legitimated brutal oppression and dispossession of entire classes of people. As Himmelfarb remarks, its logic "was the logic of Adam Smith, and there was nothing in the principle of population that was not implied in the now 'classical' principles of political economy...Malthus only made more dramatic what Smith had earlier insisted upon: that men were as much subject to the laws of supply and demand as were commodities..."

A Struggle for Survival

Darwin's theoretical formulations came from the same social context. And if Malthus' proposition appealed to Darwin for its suggestion of natural selection through a "struggle for life" (a term that Malthus himself had used), it appealed to the English ruling classes for the same reason. Darwin's theory, despite a wealth of keen observation, was in Rifkin's words, "a reflection of the industrial state of mind" that anthropocentricized nature by imposing economic categories on it. As Mumford writes, "Darwin was in fact imputing to nature the ugly characteristics of Victorian capitalism and colonialism. So far from offsetting the effects of the mechanical world picture, this doctrine only unhappily offered a further touch of cold-blooded brutality..."

The struggle for survival (a parallel of the human struggle) was the motor force of progress and evolution. "All organic beings," Darwin argued in *The Origin of Species*, were "striving to seize upon each place in the economy of nature." Yield, output and the motive of efficiency inform all his work. "Hard cash paid down over and over again" was the "test of inherited superiority." In an argument derivative of Adam Smith's notion of economic progress, even the evolution of simple to more complex organisms represented a kind of physiological division of labor. And European colonialism was legitimated too, as it justified, in Darwin's words, the "extermination of less intellectual lower races" by the more intelligent higher races." There was "one general law," he argued, "leading to the advancement of all organic beings, namely, multiply, vary, let the strongest live and the weakest die."

It would be careless and inaccurate to argue that Darwin's insights were entirely the product of bourgeois mystification and scientism. There was even the implicit insight in Malthus that infinite technological progress and population growth would ultimately crash against natural finite limits—a point



overlooked by the utopians and their bourgeois, Marxist and syndicalist descendants. But if in Darwin, particularly, there was an ambiguity between the organic understanding he developed and the mechanistic, economic terms in which it was often expressed, there was no such ambiguity in the Darwinism, and its offspring, the Social Darwinism, that followed. Social Darwinism and Malthusianism became enshrined in modern ideology, in the viewpoint of the powerful classes and the powerful nations. As Darwin's contemporary Herbert Spencer put it, humanity's very well-being depended on this struggle for survival: "The poverty of the incapable, the distresses that come upon the imprudent, the starvation of the idle, and those shoulderings aside of the weak by the strong, which leave so many in shallows and in miseries, are the decrees of a large, far-seeing benevolence." By way of this "conjurer's trick," as Engels called their formulations (though he too suffered from its determinist, productivist methodology), bourgeois economic doctrine was transferred to nature, and then back again to human society and history to prove its validity as eternal natural law.⁴

Modernizing Malthusianism

So the deep ecology position on overpopulation, contrary to being part of a "new paradigm," is part of an old one, the economic Malthusian theory. It has also been pretty standard fare in ecological writings since Darwin.⁵ Nevertheless, the overpopulation thesis is still compelling, especially when one looks at a graph of human population growth since prehistory, with the right-hand side shooting up precipitously in the last two or three centuries. The population question, as Neo-Malthusian ecologist Paul Ehrlich (author of *The Population Bomb*) remarks, is "a numbers game", but imagine a country like Bangladesh, with its large population and all the problems of private land tenure, peonage

and institutional scarcity that it faces, doubling in size in the span of a generation. As human numbers climb to six, seven, eight billion in the next few decades, it is fair to ask what possibility there will be for liberatory societies living in harmony with the natural world. And technofix responses—from fusion power to super-bioengineered agriculture to space colonies—are either absurd fantasies or "solutions" that are worse than the problem itself.

At some point in population growth, neither natural integrity nor human freedom is possible. But despite Malthusian numerology, that point is not self-evident. Consequently, overpopulation may be one source of the present world hunger crisis, but it takes a leap of faith to automatically conclude that famine is purely the result of "natural laws" when it occurs in a class society with a market economy and private ownership of land. Ecology reduced to ideology tends to simplify what is complex when it ignores the interrelations within human society in its analysis. But the interpretation of hunger is deadly serious because on it depends how ecologists, and all of us, respond to a whole complex of associated problems. Ideas have material consequences, so it is the responsibility of deep ecologists to examine their premises carefully. These premises find their most thorough expression in William Catton's book, *Overshoot*.

Based on the ecological concept of "carrying capacity" (the capacity of an ecosystem to support a given population of a species in a sustainable and renewable manner), Catton's thesis is that "human population has long ago moved into a dangerous phase of the 'boom-bust' cycle of population growth and decline." He explains in the Tobias anthology, "Carrying capacity, though variable and not easily or always measurable, must be taken into account to understand the human predicament."

Of course Catton does far more than take this ecological concern into account. He creates a theory of history around it, attributing the rise of state civilizations, technological development, war and imperial rivalry, economic crisis and unemployment, political ideology and cultural mores, revolt and revolution all to population pressures. It is an ambitious theory, but it follows the same economic logic and mathematical mystification as that of Malthus. Catton's book reveals how scientism, the lack of a social critique, and captivity to a paradigm or model can lead to misinterpretation.

Catton's view starts from a Darwinian perspective of a competitive struggle for survival between species. Human beings have historically followed a process of "takeover" of carrying capacity ("diverting" resources from other species to themselves), "essentially at the expense of its other inhabitants." But human expansion inevitably had to come up against the limits of scarcity, of the land's carrying capacity. Only the discovery of new territories and new forms of extraction would forestall population crash. The first leap was the "horticultural revolution," which made it possible for "a minuscule but increasing fraction of any human tribe to devote its time to activities other than obtaining sustenance." With this increased human "management" of the biosphere, carrying capacity was increased, and with it, human population.

The next significant stage in development occurs at the end of the European Middle Ages (and this book has a very

Euroamerican focus), when the known world was "saturated with population," making life intolerable and threatening population crash. The discovery of the Americas, however, changed everything. "This sudden and impressive surplus of carrying capacity" shattered the medieval vision of changelessness, and laid the foundations for an "Age of Exuberance," with its "cornucopian paradigm." "In a habitat that now seemed limitless, life would be lived abundantly." New beliefs and new human relationships were born from the increased carrying capacity, including a revolution in invention and technology (though elsewhere he argues that the development of technology is a result of population pressure rather than this "exuberance"), a democratic world view and an "emotional exuberance" characteristic of the new American society, leading the modern world "to suppose that mankind was largely exempt from nature's limits."

But as population quickly expanded, the next stage of expansion of carrying capacity was the development of "phantom carrying capacity," extracting only temporarily available, nonrenewable resources to support burgeoning numbers, a "drawdown" form of takeover which relies on petroleum, minerals, etc. This dependence led to "overshoot" and the present "post-exuberant age," in which human numbers have long exceeded the long-term, renewable carrying capacity of the environment, bringing about inevitable "crash" or "die-off" of the population. "There are already more human beings alive than the world's renewable resources can perpetually support," he argues. Carrying capacity is also being diminished by toxic industrialism, "unavoidably created by our life processes."

While there are many responses to this crisis including revolutionary upheaval or faith in technology, he asserts that only an ecological paradigm, which recognizes carrying capacity limits and the need to reduce human numbers, will work. "The cumulative potential of the human species," he writes, repeating Malthus, "exceeds the carrying capacity of its habitat." With this incorporeal truism regarding a *potentiality*, he concludes, "No interpretation of recent history can be valid unless it takes these two factors and this relation between them into account."

Catton's book is not without its insights and thoughtful observations, and his arguments are often persuasive, relying as they do on the obvious—the destruction of nature by civilization, the increase of human numbers, the finite limits of the earth. Unfortunately, his thesis is only a rehash of Malthus: scientifically reductionist, simplistic, and highly ideological. Attempting to turn "ecological principles into sociological principles," he turns sociological distortions into natural law.

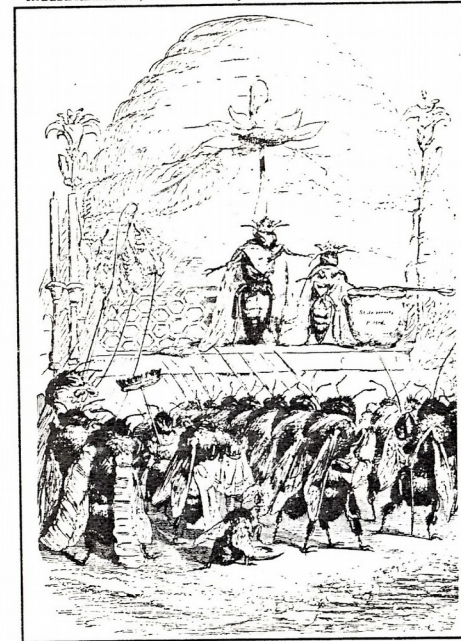
Scientific Reductionism

There is a kind of inverted anthropocentrism suggested in Catton's idea of takeover and interspecies competition for "resources" that, one suspects, secretly wishes to eliminate humans altogether from nature in order to impose some hypothetical balance (a view held without irony by some deep ecologists). This is the struggle for survival and law of the jungle left over from Social Darwinism. But it is also possible to postulate a mutualist equilibrium between humans and the rest of nature throughout the vast majority of our

sojourn on this planet, in which human subsistence has even nurtured and encouraged the life of other species.⁶ Catton's paleontology is also skewed, with its implicit Hobbesean picture of primitive life as a miserable struggle for subsistence, and its facile description of the origins of agriculture and the emergence of hierarchies. His historical theory of stages is patterned after the standard textbook model of progress.

The real shortcomings of Catton's thesis are most apparent in his historiography and analysis of the modern epoch. His scientific reductionism misinterprets the rise of capitalism and present capitalist society. His simplification of the whole convergence of cultural-historic developments—rising mercantilism and industrialism, the spread of invention, statification and national consolidation, exploration and conquest, the slave trade, and more—to a species "exuberance" (like algae in a petri dish) due to increased carrying capacity, is biological determinism at its crudest. He paints a rosy picture of Europe as it was depopulated in the mass flight to the Americas, overlooking that despite "increased carrying capacity" there, conditions worsened for most people during the conquest.

That the riches in America and the cheap labor of her indigenous and imported slaves provided raw material and "increased carrying capacity" for emergent capitalism goes without saying. But there is little or nothing in Catton's history about this "original accumulation" that paid for industrialization, which is why he fails as well to understand



the character of U.S. civilization. The "abundance and liberty," he writes, had "ecological prerequisites"—though he doesn't explain what were the prerequisites, then, of the slaveocratic, exterminist, repressive side of the civilization. (Nor does his model illuminate the contrast between North America and Latin America, which had the same "ecological prerequisites," yet an exceedingly different social character, leading to that oppressive and uneven relationship between them with which we should all be thoroughly familiar.)

Catton's portrayal of U.S. development is an oddly formulated apology for empire. Extolling the frontier, he attributes American democracy to a simple surplus carrying capacity (in an argument, coincidentally, which implies that current scarcity must inevitably lead to authoritarian rule). "A carrying capacity surplus facilitates development and maintenance of democratic institutions," he declares, while "a carrying capacity deficit weakens and undermines them." Thus, political differences between the U.S. and Europe were ecological: "Europe was full of people; America was full of potential." Such sloppiness not only effaces English and French (revolutionary) democracy and other libertarian forms from the picture, it overlooks a country like Russia, also relatively empty of people and "full of potential," which suffered under despotism and autocracy.

This pseudohistory is mixed with sociological-ecological clichés, and ends in patriotic fervor. Low population density, he tells us, renders "human equality...feasible, even probable."



(Saudi Arabia?) U.S. history, therefore, "has thus exemplified the dependence of political liberty upon ecological foundations." He makes no reference here to slavery, the conquest of northern Mexico, the extermination of the Indians, the interventions into Central America, the bitter class conflicts in mines and mills. And he leaves us with a high school textbook picture of the country: "Settlers in the New World *did* create a new and inspired form of government in a land of opportunity...Americans *did* win the west...A great nation was built in the wilderness..."

Our Yankee Doodle Dandy concludes in an outburst of political cant we've heard from Daniel Boone to Ronald Reagan: America "tried honestly and generously to share the fruits of its frontier experience with people in other societies overseas..." (like Vietnam and Nicaragua!). But as the empire extended its domination overseas, this sharing (usually in the form of a massacre of an Indian village) came to nothing, since "American imperialism was essentially fruitless..." One cannot resist thinking here of the "fruitless" U.S. imperialism in Latin America banana republics. He pays homage, commendably, to nineteenth century anti-imperialists who warned against American conquest in the Caribbean and the Philippines and counsels that ecological limits have brought the U.S. empire into decline, sadly acknowledging, "We did not recognize precedents in time to avoid the frustration of ill-founded aspirations."

But there are those among us who celebrate and would like to more fully participate in the collapse of this and every empire, in order to find our way back to a harmonious relation with nature so longed for by deep ecologists. That this book has elicited such an enthusiastic response from them is disappointing, reflecting their serious political ignorance and conservative reaction to imperial decline. If anything, they should have noticed the connection between empire and habitat devastation—from ancient times to the carpet-bombing and defoliation of Indochina. Why is deep ecology so superficial when it comes to an analysis of contemporary empire, its origins and history?

An Economistic Analysis

In the economistic manner of Social Darwinism, Catton turns the natural world into a savings bank, yet he ignores global capitalism itself. So, for example, the collapse of the German economy after World War I, the Great Depression, and even the oil shortages of the 1970's were the result of natural scarcity and "carrying capacity deficit," rather than economic fluctuations (though ultimately real shortages of nonrenewable materials are inevitable). Manipulating a host of statistics, he explains that if current agriculture were to revert to preindustrial forms, "four earths would be needed" to support the present population. The rising use of copper, steel and aluminum are also examples of "draw down" to extract needed phantom carrying capacity to support the population. In another tortured mathematical argument, we are told that in 1970 U.S. energy use amounted to 58 barrels of oil per capita annually. By strenuous calculation, he demonstrates that were we to try to get this energy from renewable, agricultural sources, rather than "phantom carrying capacity" of fossil fuels, we would only get 1.27% of total U.S. energy consumption. After this long numerical exegesis, he

concludes, "It should be clear, therefore, that the actual population of the United States had already overshot its carrying capacity measured by the energy-producing capability of visible American acreage."

But of course it is not so clear at all. If carrying capacity has been exceeded and there isn't enough to go around, why are crops systematically dumped and destroyed? Only a critique of the system that turns food into a commodity can make sense in such a context. And his numerical mystification fails to note that "per capita" energy consumption includes the urban megalopolises, the glut of industry, transport, the military, and the frenetic form of life specific to industrial capitalism. To identify biological carrying capacity with such figures is patently absurd.

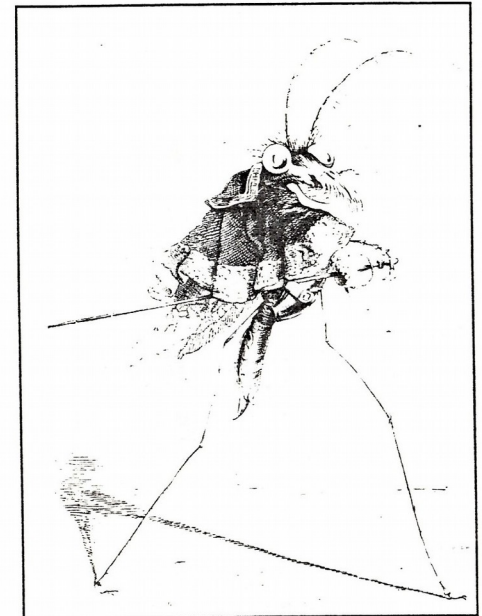
There is no doubt that the present form of existence is destructive, and increasingly destructive as population grows. But to argue, "Even our most normal and non-reprehensible ways of using resources to support human life and pursue human happiness" are destroying the environment is to forget that the form of culture in industrialism and the manner in which pursuing "life and happiness" is organized, are destroying life, not necessarily sheer population numbers. The toxic wastes produced by industrialism are not "unavoidably created by our life processes," they are the result of capitalist looting and a pathological culture. People do not need either vast energy consumption or toxic waste production to be kept alive; in fact, we are being steadily poisoned by it.

The notion of carrying capacity is trivialized by reduction to absurd statistics. No one really knows what the earth's actual carrying capacity is, or how much land we need to live in a renewable manner. What have megatech projects, freeways, asbestos, nuclear power, armaments production, or the automobile to do with biological carrying capacity? What have they to do with anything except the inertia of investment, technological drift, and capital accumulation? Catton's ecological paradigm reduces everything to numbers and mechanistically applies its analysis to society, rendering it blind to the actual forces leading to extinction. When this methodology compares, for example, statist wars and imperial rivalry to the territorialism of animals, it imposes the (current) scientific description of one highly complex order onto another, unrelated one. This is pseudozoology at its worst.

Technology and Alienation

Catton's discussion also misapprehends the critical role of technology in the present crisis for all the same reasons (though it is not entirely devoid of insight or thoughtful observation). Catton follows the standard line of reasoning (so brilliantly discredited by Lewis Mumford in the early chapters of *The Myth of the Machine*) that sees human species-essence as that of a tool-using or "prosthetic" animal. In general, he confuses tools and tool use with the technological system. So, for example, seeing clothing (like all tools) as a prosthesis, he decides that central heating and air conditioning in modern buildings are simply extensions of clothing. His conclusion is thus predictable, and conforms to the standard ideology of technology: "If the digging stick was a prosthetic device, so was the modern power shovel."

This myopia discerns no difference between living in a hut or pueblo and a mega-high rise, or between a spear and a



missile, confusing the similarities between such phenomena and their far more important distinctions. It is beyond the scope of this essay to discuss this fallacy in detail (and I have written about it already in "Technology: A System of Domination," in the Winter 1984 *FE*), but the metaphor of all technics as prostheses misses the qualitative transformation that occurs as technology becomes a system that envelops human beings and society, modifying their nature to conform to its operational demands.

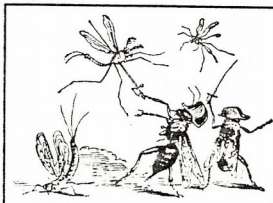
When, for example, he employs the prosthesis metaphor to describe a pilot strapping a jet airplane to his waist, Catton forgets that the pilot becomes totally enclosed in an artificial environment and utterly dependent upon a technological system—all of it the crystallization of coerced labor, hierarchic domination and stratification, of remote control and alienation. For the same reason Catton misunderstands work, describing the technological and economic division of labor (in an uncanny inversion of Darwin's industrialized model of complex organisms) as "functionally equivalent to the interactions of diverse species." But these "biotic niches" are only positions in a social hierarchy, a work pyramid—the perfect definition of civilization.

Because its devastation is self-evident, Catton understands progress as "a disease." But he only seems to think so because it contaminates the habitat, forgetting that it contaminates the human spirit as well. "The more colossal man's tool kit became," he writes, "the larger man became, and the more destructive of his own future." There is no recognition in this formulation of alienation and the fundamental desire to cease

being a thing among things, and to become an integrated, living being once more in an animate world. The more colossal technology has become, the smaller the individuals imprisoned within it, and the more suffocated and crushed by the artificial world built by their forced labor. This anguished condition is the authentic source of revolutionary change that will put an end to industrialism, rather than a scientific paradigm of energy exchanges between organisms and environment (which in any case has now been recognized by biotechnological capital as the basis for its further conquest of nature).

Scientific Ideology As Material Force

It follows that Catton's view of radical revolt is very negative. He has little sympathy for anti-colonial movements, and even though it was during the 1960's (that "crescendo of ugly, mindless and malicious behavior") that an environmental and anti-industrial awareness was renewed, he can only compare the radicalism of the period to "queue-jumping," a panic response, even to nazism. His monolithic interpretation attributes all of these responses, of course, to population pressure. Rejection of the corporate state and a reorientation towards nature are criticized as superficial unless they are founded on an understanding of



"geochemical processes" and resource limits. Radicals seek a "magic recipe for avoiding crash," he argues, and slogans like "Stop the bombing now!," "Freedom now!" and "End apartheid now" (his list), as well as the "theft and publication of secret documents" (presumably the Pentagon Papers) and "the burning of flags and embassies" are only destructive panic responses and "queue-jumping." Even peace movements are to blame for missing "the environmental sources of antagonism."

His alternative is one of "enlightened self-restraint" and further inquiry (presumably in orderly lines behind politicians, scientists and academics). He rejects "rampant competitiveness" while forgetting that the image of such competitiveness pervades his whole portrayal of nature. His proposals are few and tame: "ecological modesty," phasing out fossil fuels, a reform of the mass media, and a defense of existing environmental laws. Society must act "as if...we had already overshot," he writes, in a subtle softening of his thesis, and the crash must be ameliorated to save as many human lives as possible by a conscious renunciation of destructive industrialism and its culture.

His conclusions avoid advocating the die-off that his thesis suggests is inevitable. "Bankruptcy proceedings" must be held "against industrial civilization, and perhaps (my emphasis) against the standing crop of human flesh," he argues; and in another modification, he says, "There might be already too many of us" to return to a simpler, renewable life. He even warns that his method will not point to "obvious solutions to the predicament." Perhaps he perceives, if dimly, that scientific ideology becomes a material force with consequences. Social Darwinism, combined with eugenics (the genetic "control" and "improvement" of breeds), was employed to justify colonial conquest and to legitimate

reactionary immigration policies around the turn of the century, and even led ultimately to eugenics-based extermination of psychiatric inmates, Jews, Gypsies and other "subhuman breeds" by nazi technocrats in their death camps. Today, overpopulation "theories" are used by development bank bureaucrats to justify industrial development of sensitive wilderness areas (as in northern Brazil), and economic planners are currently utilizing "triage" analysis (a battlefield medical operation in which certain of the wounded are left to die in order to concentrate on those with a better chance of surviving) to consign masses of Third World peoples to starvation for the purposes of restructuring capital and paying off the national debt of countries like Mexico and Chile.

The Grasshopper and the Ant

Catton at least has the decency to distance himself a bit in his conclusions, seeking to avoid the "cruel genocide" that they imply by searching for an ecological reorientation and attempting to spare human life. There are others in the ecology movement who share the Malthusian promises of his flimsy "overshoot" thesis who embrace such genocide—for others, that is. One prominent example is right-wing biologist Garrett Hardin (published in the Tobias anthology, though he is not in agreement with radical environmentalism). Hardin's zero-sum view of nature identifies bourgeois property rights with natural law: only private property rights will protect the environment since treating nature as a shared "commons" will lead some to act irresponsibly and others to suffer for it. He argues, in true Malthusian neoconservative form, that "excessive altruism" (identified with liberalism and Marxism, of course) will plunge all, rich and poor, powerful and weak, "into the Malthusian depths."

Proposing instead a "lifeboat ethics," Hardin's theory is merely a repeat of the fable of the grasshopper and the ant, with a tinge of imperial hubris. While profligate and "over-fertile" Third World grasshoppers have "ruinously exploited" their environment, hard-working Euroamerican ants have built their fortune and future. Now the hapless grasshoppers are swimming around the lifeboats of the wealthy nations, begging for admittance or a handout. But helping them will only eventually swamp the boats. "Complete justice, complete catastrophe." An elegant parable. Hardin prefers instead "population control the crude way," and "reluctantly" suggests borders be closed, since "American women" would be rapidly surpassed in reproduction by immigrants.⁷ In the Tobias anthology he argues the impossibility of internationalism, proposing national patriotism as an alternative, stating, "there must be the patriotic will to protect what has been achieved against demands for a world-wide, promiscuous sharing." The nation "must defend the integrity of its borders or succumb into chaos."

Of course, Hardin's "theory" only distills the diminished, crackpot outlook of free market ideology and imperial arrogance, since the wealthy nations made themselves so by the systematic looting not only of the heritage of their own peoples but particularly of the riches of the Third World. His "solutions" are the virus itself. But they are acceptable to many ecologists, who, according to Devall and Sessions,

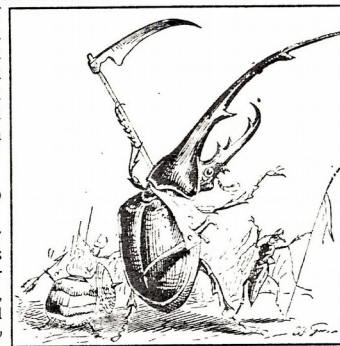
"argue that it is sometimes tactically wise to use the themes of nationalism or energy security to win political campaigns." It is a view held as well by the KKK, which (less reluctantly) has taken to armed patrols of the U.S.-Mexico border to prevent Latin Americans from entering "illegally."

This patriotic nationalist fervor and aversion to Hispanics is also shared by novelist Edward Abbey (*eminent grise* and guru of the Earth First! group), who (from the formerly Mexican territory of southern Arizona), wrote in a letter to *The Bloomsbury Review* of April-May 1986: "In fact, the immigration issue really is a matter of 'we' versus 'they' or 'us' versus 'them.' What else can it be? There are many good reasons, any one sufficient, to call a halt to further immigration (whether legal or illegal) into the U.S. One seldom mentioned, however, is cultural: the United States that we live in today, with its traditions and ideals, however imperfectly realized, is a product of northern European civilization. If we allow our country—our country—to become Latinized, in whole or in part, we shall see it tend toward a culture more like that of Mexico. In other words, we will be forced to accept a more rigid class system, a patron style of politics, less democracy and more oligarchy, a fear and hatred of the natural world, a densely overpopulated land base, a less efficient and far more corrupt economy, and a greater reliance on crime and violence as normal instruments of social change." The contrast drawn between the U.S. and Mexico by this self-proclaimed "anarchist" is astonishing on several counts, any one sufficient to reveal his utter racism and historical stupidity. One might mention in passing the relationship between the corruption in the Mexican economy and U.S. economic domination (why, for one small example, U.S. companies and their subsidiaries can pollute and ravage the land and people with impunity there). Or perhaps we should consider the great love of nature he attributes to the North Americans, the absence here of oligarchic control, the "efficient economy." And, of course, "we" don't rely on crime and violence to effect political policy (as in Nicaragua, El Salvador, Guatemala). Abbey should be ashamed, but he isn't; he has a following.

A Deep Ecologist Who Advocates Genocide

Among his following are many of the ecoactivists and deep ecologists of Earth First!, including their apparent leader for life, Dave Foreman, who in an interview with Bill Devall in the Australian magazine *Simply Living* said, regarding starvation in Ethiopia, that "the best thing would be to just let nature seek its own balance, to let the people there just starve..." Giving aid would of course only spur the Malthusian cycle, thus "what's going to happen in ten years time is that twice as many people will suffer and die." Notice how Malthusian brutality is couched in the terms of humanitarian concern.

"Likewise," he said, "letting the USA be an overflow valve for problems in Latin America is not solving a thing.



"I take it as axiomatic that the only real hope for the continuation of diverse ecosystems on this planet is an enormous decline in human population...if the AIDS epidemic didn't exist, radical environmentalists would have to invent one."--Miss Ann Thropy, a regular columnist in *Earth First!* (very likely Dave Foreman, EF! editor himself), in the May 1, 1987 issue.

"I am pleased to find the population problem discussed more and more in *Earth First!*. Aside from biological warfare, however, I haven't read of any solutions."--Suslositna Eddy, in an article in the March 20, 1987 *Earth First!*.

It's just putting more pressure on the resources we have in the USA...and it isn't helping the problems in Latin America." Notice here how rapidly the "anti-anthropocentric" reverts to a nationalist resource manager. But his entire formulation, like those of Abbey and Hardin, reverses social reality and conceals the real sources of hunger, resource pressures, and refugees.

Central America is being devastated by U.S. corporate exploitation and a genocidal war to make sure the plunder continues. One horrible example is the U.S.-caused war in El Salvador, defending a death squad government that would likely collapse in weeks without U.S. backing. The war has forced one quarter of the Salvadoran population to become refugees, and a half a million of them have fled to the U.S. Comments like Foreman's might not be quite so obscene if there were consistent coverage in his newspaper of U.S. exploitation in Central America (apart from the occasional material on rainforests, usually in a Rainforest Network supplement) and denunciations of the U.S. annihilation of the Salvadoran people, cultures and lands, but there is no antiwar component in the paper and little about these interrelated problems in Central America. Foreman, too, ought to be utterly ashamed, but Foreman, too, has a following.

When Devall asked Foreman why the mainstream environmental

movement had not addressed the population issue, the reply was, "you can't get any reaction." Foreman appeared to be implying that no serious dialogue could be generated on it, but if so, he was being less than candid. Last summer I sent a friendly but critical letter to *Earth First!* which criticized contemporary Malthusianism and warned them to "not make the mistake of advocating the genocide that the industrial system is already carrying out." It was never printed, nor did it

receive any response, though in subsequent issues Foreman stressed the need for an exchange of ideas and diverse points of view, describing the paper as "a forum" of the deep ecology/Earth First! movement.⁸

I sent another letter questioning why mine was never printed, pointing out the problems with Foreman's comments on immigration and Ethiopia, and warning them to avoid becoming "vanguardist" by suppressing the diverse views they claim to want and which undoubtedly exist inside the deep ecology current. I finally received a note from Foreman himself, groaning, "Gawd, I'm bored with left wing humanist rhetoric." In answer to my question about open discussion on the population issue, he replied, "My honest feeling is that the vast majority of those who consider themselves Earth First!ers agree with my position...I am all for cooperation with other groups where it fits, but we have a particular point of view which we are trying to articulate. Call it fascist if you like, but I am more interested in bears, rainforests, and whales than in people."

Well, it's certainly Foreman's business to print, or not print, whatever he likes.⁹ And since I have access to publications myself, I gave up attempting an open and egalitarian discussion with him and decided to further research deep ecology and the hunger question. It was later that his comments on Ethiopia and related issues came to my attention, but they heightened my sense of unease with the direct action environmental group that had previously earned my respect and praise in the *Fifth Estate*.

While Foreman's presumptuousness about speaking for the "vast majority" of Earth First! (and by extension, deep ecologists and even other species) is only manipulation, his acceptance of the label of fascist is telling. There is a definite connection between fascism and his perception of world corporate genocide as nature taking its course. It is also fascistic to call for an end to immigration and the closing of borders, especially to exclude those who are fleeing a war waged by one's own country. (Perhaps Earth First! will volunteer to help round up those courageous people in the Sanctuary movement who, in the best tradition of the antislavery underground railroad, are aiding the refugees. Or they can help the KKK apprehend Guatemalan Indians, an animist, land-based people, fleeing a holocaust perpetrated with the active involvement of the U.S.) And, finally, smearing all anticapitalism or critiques of global corporate empire as "an ossified leftist worldview that blames everything on the corporations" (as Foreman does in the 3/21/87 *Earth First!*) is reminiscent of the anticommunist pseudoradicalism of the nazis themselves. Certainly, "capitalists are not the only problem" (Foreman, in the 6/21/87 *Earth First!*). But Foreman should realize that the problem won't be resolved as long as capital exists. To deny the connection between chopping down trees and chopping down peasants is to show willful ignorance and to act in silent complicity with murderers.

The Tattered Food Web

The entire question of food is integral to deep ecology because food is essential to life. As Gary Snyder writes in the Sessions/Devall anthology, "The shimmering food-chain, food-web, is the scary, beautiful condition of the biosphere...Eating is truly a sacrament." Anti-Malthusian and Malthusian will

agree that the food-web is now in tatters. Agriculture is now a destructive industry and people are going hungry in enormous numbers. Everyone agrees that fundamental imbalances underlie this situation. But what are they?

Foreman argues (in his interview) that "domesticating plants and animals is violence of the worst kind because it twists their natural evolutionary potential." Only a return to hunter-gathering and the die off of the vast majority of people will bring things back into balance. Even gardening is a "violent activity." This viewpoint is not much of an option for the majority of us, and it's hardly going to be pursued. (In any case it is the old alienated dualism operating, that denies humans any place in nature, denies what we have evolved into; it's like decrying the mammals for eating dinosaur eggs. I am reminded of Kirkpatrick Sale's droll comment in *Human Scale* that "one must not, after all, confuse the ecological ideal of living within nature with the somewhat more Eastern notion, recently popular here among the hair shirt wing of the back-to-nature people, of living under it.")

The deep ecologist argument, based on Caution's carrying capacity theory, is that there is no longer enough to go around in anything resembling a renewable, sustainable manner. Any suspicion that starvation might presently be the result of distribution and other social conflicts alone, rather than natural limits, is considered a "humanist," "anthropocentric" (and probably Marxist) fantasy. (Perhaps there are deep ecologists who do not agree, but we haven't heard of them.)

The population question is a numbers game, with many variables and many possible interpretations, as a perusal of the literature will confirm. Population has skyrocketed in the last few centuries. In the last century world population has more than doubled and has just hit the five billion mark. The growth in the birth rate peaked during 1960-65 and has been slowly falling. In 1980 it was about 2.17 percent and is expected to decline to about 1.84 percent by the year 2000. Growth in developed countries has been slowly grinding to a halt, which means that by the end of the century, when we reach six billion, five billion will be in the Third World.

The world population growth rate has been declining even more than was previously expected, but nevertheless, population is still rising in overall numbers, from about 76 million a year at the present time to an expected 93 million at the century's end. One demographic forecast is that "if the world could reach replacement-level fertility by the year 2000, the world's population would stabilize at around eight and a half billion towards the year 2100." As Paul Harrison observes in his book *Inside the Third World* (Penguin, 1982), this means "that timing, in the battle to beat population growth, is of the essence," since the longer population stabilization takes, the higher the population will be down the line.

He describes the population growth as a result of the "demographic transition," as a result of a decline in the death rate rather than a boom in the birth rate, which is falling though much more slowly. As the birth rate slows, it should eventually catch up with the death rate decline, but it could take a good century or more in the Third World. There is some hope in the fact that the birth rate is slowing down even while the population in the Third World is actually much younger than before, but the overall picture is not optimistic at all.

"All the threats to the land, with the possible exception of salinization, are caused by poverty and overpopulation," writes Harrison, "and, in turn, they accentuate poverty." His book is a bleak picture of the state of the Third World and its implications for all of us. "Man and the land in poor countries are locked in a destructive and seemingly inescapable relationship, in which they are spiralling down, in self-fuelling motion, towards mutual destruction." The loss of land appears to be the main cause for the undermining of overall well-being--"the dispossession of small holders, increasing landlessness, mechanization, increasing population" all go together. What is happening in the Third World today seems to parallel the industrialization of Europe, which went through dispossession, landlessness, and population growth. But this time the consequences are further down the spiral for the whole world.

And yet Harrison still maintains that the entire crisis could at least have been lessened, "first and foremost by radical land reform and the establishment of cooperatives, giving everyone who lives on the land access to the land and its produce." Harrison is no *zapatista* or agrarian revolutionary, but he recognizes the need to promote subsistence, equity in resources and basic health. In most countries, though, "government policies have been the direct opposite," and land reform has been either corrupted or a cover for the actual undermining of subsistence.

"There is really no such thing as world hunger," Harrison observes, "but only hunger of particular areas and particular social groups. The total food resources available in the world would be perfectly adequate to feed everyone properly if they were fairly distributed among nations and social groups." This is Kirkpatrick Sale's argument in *Human Scale*, that there is more than enough to go around, and that "there is not a single country to which the U.S. exports grains that could not grow those grains itself." This view is also held by Frances Moore Lappe and Joseph Collins, whose 1978 book *Food First: Beyond the Myth of Scarcity* (dismissed as "absurd" in a one-liner by Foreman) is perhaps the most sophisticated anti-Malthusian argument available.

Despite some shortcomings in their view (a marked social democratic, prodevelopment stance and a lack of criticality concerning industrialism as a system and socialist countries like China, in particular), their arguments are very persuasive and bring together a critique of industrial agriculture and the global market that would help deep ecologists to ask deeper questions about hunger.¹⁰ The notion that present scarcity is generated by overpopulation cannot be substantiated, they argue; not that there are no natural limits, but that "the earth's natural limits are not to blame." The world is presently producing enough grain to supply everyone's caloric and protein needs. (A third of it goes to livestock.) And these figures do not include the many other nutritious foods available, such as beans, nuts, fruits, vegetables, root crops, and grass-fed meat. The Malthusian argument "is worse than a distortion," they argue, since it shifts the blame to "natural limits" and to the hungry in a world where "surplus" food stocks are dumped like any other commodity to increase their profitability. Boring, left wing humanism notwithstanding, the refusal to understand that food has become a commodity is to mystify the modern shredding of the sacred food web.

The Global Supermarket

What are the causes of hunger? Historically, we should remember that colonialism wrecked subsistence in most countries, bringing with it an emerging capitalist economy, wage system, cash crops and monoculture, destruction of traditional economies, forms of sustainable agriculture, as well as the destruction of people's basic land skills with their reduction to plantation workers. With the traumatic destruction of indigenous cultures came a desperate acceptance of and desire for the industrialized goods of western commodity society. Contrived by colonialism, this recipe for disaster accounts for the world crisis we are now witnessing.

Today powerlessness over their lives and land is leading the people of the Third World to hunger and despair. Large landholders control the vast majority of the land in poor countries (and rich ones as well). They are also the least productive farmers. In 83 countries some three percent of landholders control 79 percent of all farmland. Their yields are lower, consistently so, than those of small landowners. Much of their land is left unplanted and is held to keep others from using it to compete on the market. A Colombian study in 1960 showed that the largest landholders, in control of 70 percent of the land, planted only six percent of their land. Peasants driven from the land by large landholders, as in Central America and particularly El Salvador, are driven up the mountain sides into infertile lands where to eke out a living, they cause erosion and generalized destruction of the land. When they try to regain their lands, they are shot down either by paid mercenaries or the official army and police. Or they flee to the cities and thus aggravate the problem of urbanization.

In Kenya in 1970, "3,175 large farms owned by Europeans, individual Africans, corporations and some cooperatives, occupied 2.69 million hectares of the best land, while the country's 777,000 smallholders were crowded into only 2.65 million hectares," Harrison reports. "Even among the latter there were great disparities: the 52 percent with farms below two hectares occupied only 15 percent of the land, while the top 7 percent took up more than a third of the total." Kenya exports cotton, tea, tobacco, coffee, and (Del Monte) pineapple, while its people go hungry. Privatizing land holdings and destroying older traditions of community mutualism has undermined subsistence throughout Africa and Asia. As a U.N. report on the conditions of the Sahel (Mauritania, Mali, Niger and Chad) states, "All it now takes is a year or two of short rain and what is left lands in the hands of a few individuals." Drought in Africa was part of a millennia-long cycle. But it was cash crop exploitation, a market economy and taxation that led to starvation there rather than drought. "Ships in the Dakar port bringing in 'relief' food (during the hunger crisis in the 1970's) departed with stores of peanuts, cotton, vegetables and meats," write Lappe and Collins. "Of the hundreds of millions of dollars' worth of agricultural goods the Sahel exported during the drought, over 60 percent went to consumers in Europe and North America and the rest to the elites in other African countries." In Chad an increase in cotton production went hand in hand with mass hunger. The increase in cotton production throughout the Sahel led a French nutritionist to remark, "If people were starving, it was not for lack of cotton."

Harrison's study confirms Lappe and Collins' argument. "Much of the best land that should be used for domestic food production in the developing countries is growing cash crops for the West," he writes, and "five of the most common, sugar, tobacco, coffee, cocoa, tea, are not doing the West much good either." Cattle production for consumption by the imperial metropolis also undermines local subsistence Harrison observes. "Sheep eat men," the peasants displaced by enclosures of common land in England used to complain. Cash crops eat men in much of the developing world."

Even during the 1973-74 hunger crisis there was no shortage of food, according to Sale. In Bangladesh, frequently referred to as the model for the Malthusian overpopulation argument (and where 90 percent of the land is worked by sharecroppers and laborers), many people starved after the 1974 floods while hoarders stacked up four million tons of rice because the majority was too poor to buy it. The cash crops themselves bring currency or goods into the agro-exporting countries, but this money goes to buy industrial-consumer goods like refrigerators, air conditioners, cars, and refined foods for the elites, as well as to pay for a booming arms race

(mostly to repress their own populations). Multinationals, meanwhile, are now taking at least seven billion dollars a year more from the Third World in official payments than they are putting back in, "and probably a good deal more via transfer payments," notes Harrison.¹¹

Cash crops go to feed the global supermarket, particularly in the metropolis, and reap huge profits for industrialization of the planet by international capital.¹² Mexican soil and labor are already supplying one-half to two-thirds of the U.S. market for many winter and early spring vegetables. The shift from local consumption to production for export to the U.S. is astonishing. In operations mostly financed and contracted by U.S. corporations, from 1960 to 1976 onion imports to the U.S. increased over five times to 95 million pounds; cucumber imports went from under nine-million pounds to 196 million pounds. From 1960 to 1972 eggplant imports multiplied ten times, squash 43 times. Frozen strawberries and cantaloupe from Mexico represent a third of U.S. annual consumption, and about half of the winter tomatoes sold here are Mexican. Meanwhile, agriculture for local consumption is being squeezed out, raising prices of basic staples.



One half to one third of total meat production in Central America and the Dominican Republic is exported, principally to the U.S. In Costa Rica meat consumption declined as exports to the U.S. grew, much of it going to fast food hamburgers.¹³ Guatemala, Ecuador, and to some extent Mexico are being turned into major flower exporters for the global supermarket. Brazil has increased production of soybeans to be fed to American and Japanese livestock by more than twentyfold in the last decade. Sale reports, "while its production of food crops has already declined." In northeast Brazil, according to Harrison, "dense stands of thick green sugar cane wave their silvery tassels in the breeze, while the laborers who plant and cut it are squeezed onto the roadsides in their little huts and have no room for even a few vegetables."¹⁴

In this scenario not even increased food production serves to help the hungry. As Lappe and Collins demonstrate, "the increase in poverty has been associated not with a fall but with a rise in cereal production per head, the main component of the diet of the poor." So the image of Green Revolution technology (drawn for example by Catton) as causing a

population increase and subsequent destruction of carrying capacity is a fiction. The Green Revolution is utilized by large landholders to produce for the global supermarket, not to feed people locally. It increases hunger by bringing the industrial revolution to agriculture, by destroying subsistence, agricultural and genetic diversity, and by creating dependence on chemical fertilizers, pesticides, and machinery--and on the corporations that produce them.

Nor is toxic-chemical agriculture a result of population pressure. The U.S. uses one billion pounds of toxic pesticides, herbicides and fungicides annually--some thirty percent of world consumption. One third goes to golf courses, parks, and lawns. Only five percent of crop and pastureland is treated with pesticides, fifteen percent with herbicides and .05 percent with fungicides. One half of pesticides go on non-food crops. Cotton alone receives 47 percent of all insecticides used. Despite a tenfold increase in use of such agents, crop loss to pests has remained about the same since the 1940's. And even with no use of such agents, crop loss figures would only rise slightly, if at all. A third of all pesticides produced, some of them illegal in the U.S., go to the Third World, but



Bruegel, *The Thin Kitchen and The Fat Kitchen*

they come back to haunt us with our morning coffee and cantaloupe.

So toxic agriculture is not a function of subsistence but of corporate profits. To link the two in a Malthusian argument is to indirectly line up with the *Wall Street Journal*, which argued that the disaster at Bhopal was unfortunate but a necessary risk in order to feed people. Bhopal wasn't only a horrifying example of a technological civilization completely out of control, it was a corporate crime. It is those sorcerer's apprentices the capitalist corporations, we might remind these careless deep ecologists, who turn scarcity and starvation in one place into luxuries somewhere else. And where people resist the operations of this "economic freedom," the armed might of the state, complete with covert and overt operators, steps in to ensure that things remain just as they are and that business goes on as usual.

Under increasing attack, squeezed from all sides, the world's poor are having large families in a desperate attempt to get support in their old age, to obtain cheap labor power on their plots or in the labor market, and to overcome high infant mortality rates. In much of the world, another child is an economic benefit and will bring more income to the family than will be expended in the child's upkeep.¹⁵ Yet there are also many indications that large families have an adverse effect on their members, who tend to be less nourished and in worse health than smaller families. Furthermore, as Harrison observes, this short-term survival strategy has long-term social costs for the community and the country in land fragmentation, erosion, poverty and urbanization. The poor of the Third World are courting "long-term ruin to avoid immediate disaster."

The World Going to Hell

Whatever the basis of analysis, the prospects are indeed grim. One cannot help but agree with Caution's statement, "The time may be near when it will take an optimist to believe the future is uncertain." The world is going to hell. And the optimism that might be found among certain investment strategists and technocrats is anything but reassuring. Industrialization continues unabated in its frenzied obliteration of life. Harrison sees overpopulation as one of several interlocking factors causing the present growing world crisis, and remarks that Malthus may yet have his say. "If a non-oil agricultural practice is not developed fast," he writes, "available food per capita will start to decline... If man does not conquer the population problem, nature will step in and do it for him." The Food First thesis supports the goal of a stabilized population but sees the population pressure more as a "symptom and aggravating factor" in the crisis. While these interpretations vary, their recommendations are similar.

Both views see a renewal of local subsistence and self-reliance as key, and both call for radical, sweeping land reform. This does not mean a simple redistribution, however, but the creation of cooperative, participatory and egalitarian societies aimed at helping the people at the very bottom. Lappe and Collins write that their perspective "is not a simple call to put food into hungry mouths." In fact, they oppose food aid because it does not reach the hungry, undermines revolt, and destroys local food production. They insist, rather, that "if enabling people to feed themselves is to be the priority, then

all social relationships must be reconstructed." This amounts to a call for agrarian revolution.

First and foremost, such a revolution must liberate women. They are "the poorest of the poor," as Harrison says. They constitute "the largest group of landless laborers in the world," since even in cooperatives and land redistributions, they are frequently shut out. Industrialization and urbanization also hurt them the most, destroying their handicrafts and worsening the unjust division of labor to "the notorious double day" of wage work and household work. If they have fewer children, they suffer for lack of labor power; if they have more, they are overburdened and their health undermined.

The population question can never be addressed until having fewer children can become a reasonable option. That means freedom for women from male domination, and an agrarian social transformation that reunites agriculture and nutrition, renews self-reliance and subsistence, and creates equality. If deep ecologists can recognize that these social questions must be resolved in order to reconcile humanity with the natural world, that a whole earth vision must be grounded in the social, they will make the leap that they desire in their understanding and practice. Human liberation is integrally bound up with the liberation of nature, and therefore is truly "deep ecological."

It is a tenet of deep ecology that nature is "more complex than we can possibly know" (Sessions and Devall). In that case, deep ecologists should refrain from blanket statements about human populations, since no interpretation can presently be substantiated in any absolute terms. (So glib remarks about someone else's "die-off" only come from a preference, not a recognition of natural necessity. In such a case "theory" is nothing but mean-spirited ideology, with fascist implications--and helps, by the way, neither bears, whales nor rainforests). Caution says there are already too many people; Sale, on the other hand, argues that the entire world's population could fit into the U.S. with a density less than England's, and in the fertile agricultural regions with a density like that of Malta. The statistics, to back up arguments, grow exponentially.

Meanwhile, practical steps must be taken to stop the process by which the world and everything in it are being reduced to money, and finally, to toxic waste. "Letting nature take its course" by consigning people to starvation is not a solution even within its own terms, since the deteriorating situation described so vividly by Harrison (and others) won't go away when a few million--or many millions--die. The earth will continue to be gouged, the forests levelled, and society's capacity to bring about change will be diminished. Such Malthusianism is not even deep ecological since it neglects the totality of the habitat destroyed for all species in the wake of the famine and doesn't recognize that environmental desolation in one place affects natural integrity everywhere. (As if borders will make a difference after Abbey builds his Chinese Wall to keep the barbarians out, when the forests are down and the land and sea poisoned in Central America. And as hunger grows here in the imperial heartland, will these cowboys patrol the interstates to keep the hungry at bay? And will they soon start insisting that people be expelled from "their" country as "undesirables"?)

Despite the shortcomings of the book, in *The*

Conquest of Bread, Kropotkin, raised the issue that remains central today for social and ecological transformation. Bread, he said, "must be found for the people of the Revolution, and the question of bread must take precedence of all other questions. If it is settled in the interests of the people, the Revolution will be on the right road; for in solving the question of Bread we must accept the principle of equality, which will force itself upon us to the exclusion of every other solution." In answer to Kropotkin's profound observation, some among the deep ecologists would prefer to respond with a simple program: let them starve.

And perhaps they have a point. Perhaps there are too many people to live in a renewable manner. Perhaps the starvation of some is unavoidable. But as long as poor and tribal peoples around the globe starve while overfed, high energy consuming bankers sit in air conditioned highrises in New York, in Paris, or Dakar, something is wrong. Before the poor of the world die of hunger--those little communities which are also small and unique parts of the whole picture, as Aldo Leopold might have said--let's deal with the neckties in the highrises. It's nature's way too, after all, for people to pool their imagination and their desires to cooperate in making revolutionary change.

Sessions and Devall write that "Certain outlooks on politics and public policy flow naturally" from ecological consciousness. This is manifestly untrue. Ecology, as I have shown, is an ambiguous outlook, and can lead in many directions. Deep ecology is layered, as is all scientific thinking about the social, with all the ideological compost and decay of a crumbling civilization about to collapse or devolve into something even more horrible. Deep ecology, starting from an intuition about the unity of life, an intuition of primal traditions present in the undercurrents of this civilizations--claims to be a new paradigm, a philosophical and social system. This outlook enjoys increasing legitimacy in radical environmentalist circles as a coherent political perspective. Yet while deep ecology may draw from many profound sources in the long oral and written traditions of natural observation, there are many deep problems with it as well.

Deep ecology loves all that is wild and free, so I share an affinity with deep ecologists that has made this essay difficult to write. I have written this detailed critique because I find it troubling and depressing that a movement so courageously and persistently involved with direct action to defend the earth can simultaneously exhibit reactionary, inhuman politics and survivalist posturing. Deep ecologists, particularly Earth First!, have come to recognize the centrality of technology in the destruction of the earth. But if they remain blind to the interrelatedness of capital and the state with the planetary megatechnic work pyramid that is devouring nature, they will become mired in an elitist warrior survivalism that will lead nowhere.

As long as deep ecology discerns the present apocalyptic period as the result of a species-wide "biotic exuberance" in the imagery of a fungus, it will remain in a mystical domain of original sin, misanthropy and Malthusian indifference to human suffering. This fatal error will not only serve to conceal the real structural sources of the present devastation--the system by which we all, dispossessed peasants and deep

ecologists alike, court disaster by simply surviving in an increasingly constricted, deadened world--but will also undermine the chances for the human solidarity that might overcome it.

I believe that little by little (and perhaps already too late), people around the world are beginning to see these connections, to recognize that capital, technology and the state are an interlocking, armored juggernaut that must be dismantled and overthrown if we are to renew a life in harmony with nature and human dignity. They are also increasingly aware that we cannot go on "living" like this, that we are sawing the branch out from underneath ourselves. The mystique of technological progress must be fought in city and country, defending habitat and halting the toxic production process.

We cannot isolate one bioregion or watershed from another--they are all part of a living organism. And we cannot separate fundamental human needs from those of the planet because they are consonant with one another, not opposed. So the changes that we all desire must occur *deep down*, at the level of human society, or nothing will prevent capital from destroying nature entirely. If an intransigently radical, visionary, earth-centered culture that fights for the earth is to flourish, radical environmentalism must confront its own ideological contradictions before they crystallize into a religion, complete with high priests and leaders, and squander what may be our last dwindling opportunities to stop this global megamachine and renew life.

--George Bradford

Footnotes

¹As I was in the process of writing this article, a recent essay by Murray Bookchin treating the same issues came to my attention. While we had come independently to many similar conclusions, I did find his essay, "Thinking Ecologically: A Dialectical Approach," helpful in formulating some of the arguments in my final draft. (See the Spring/Summer issue of *Our Generation*, \$7.95 Canadian, from Journals Department, University of Toronto Press, 5201 Dufferin Street, Downsview, Ontario, M3H 5T8 Canada). Nevertheless, I think it important to note that while Bookchin responds powerfully to the entire discussion on the question of humanism and the dangerous mixture in deep ecology of sentimental mysticism and a harshly instrumental scientific methodology, his notion that "human intervention into natural processes can be as creative as that of natural evolution itself" suggests the very technological hubris that deep ecology confuses with humanism. Given Bookchin's view of creative human intervention (and his naive position on technology in *Post-scarcity Anarchism*), what is his attitude toward biotechnology, which uses the same essential argument in legitimating its destructive meddling into the fundamental structures of nature? Bookchin's perspective needs a thorough critique which hopefully will be undertaken soon.

²The mechanistic application of so-called natural laws to society impoverishes social critique. Deep ecology articles are frequently rife with glib comparisons between humanity and "grey fuzz," lemmings, algae, and other species, followed by simplistic, almost Aesopian comments on complex issues specific to human society. A recent example is an article, "On Horns and Nukes" (*Earth First!*, September 1986), by George Wuerthner. In it, the author blithely compares the current nuclear arms races to the rivalry and "dominance hierarchy" of

bighorn rams based on horn size. I'll leave aside his zoological interpretations, but given ecological science, there is much room for differences even there. The article's real absurdity is the idea that "nuclear weapons may not function primarily as offensive weapons, but like the horns of the Bighorn ram, may represent a nation's rank within the international community." Nothing here about the complex social relations that underlie nuclearism and the arms race, such as the original (offensive) use of nukes and their continuing use as a threat to make geopolitical policy. (See Daniel Ellsberg's enlightening introduction to Thompson and Smith's *Protest and Survive* for a brief history of the uses of the bomb.) Nothing about the massified technological bureaucracy, the permanent war economy and the technological drift so brilliantly described by C.W. Mills, in *The Causes of World War Three*, back in the 1950s. Nothing about the Cold War and the militarization of culture, despite the wealth of information and the high level sophistication of much of the antiwar and antinuclear movements in this country. No, because nuclear weapons systems (and their civilization) are just the horns of sheep (and nation-states the members of a Bighorn "community"), Wuerthner wishes to avoid any "simplistic solution" to the problem, arguing: "Like the bull Elk who has lost his antlers, a direct reduction of nuclear stockpiles could destabilize the world's tenuously recognized hierarchy of military power...Such a reduction may inadvertently bring us closer to nuclear war, rather than further away." This is Reagan talking to the disarmament movement, or James Watt, with pseudoscience to back him up. What does our philosopher recommend? If horn display is part of the problem, he says, "research by the U.S. government in human perceptions of status, rank, and power might reveal a partial solution to the arms race." Perhaps the government will farm that study out to the Rand Corporation or one of the other think tanks and let us know how it turns out. Meanwhile, such willful ignorance on this naturalist's part not only reflects the limitations of ecological ideology, but almost brings tears to one's eyes over the contradiction between the environmentalist concern for nature and its legitimization of the nuclear empire—this kind of silliness from a journal claiming to be at "the cutting edge" of this "new ecological paradigm."

³As Dennis Wrong argues in *Population and Society* (1966), the capacity for population to surpass subsistence is undeniable, "but it leaves entirely open the question of the degree to which at a given time the capacity is actually being realized...for whenever a case is found in which the means of subsistence are abundant and population growth falls short of Malthus' maximum rate, by definition, the checks are at work preventing a more rapid increase."

Among many naturalists, the Malthusian proposition is not considered applicable to either human or animal populations. As D.H. Stott writes (in "Cultural and Natural Checks on Population Growth," in Andrew P. Vayda, *Environment and Cultural Behavior*, 1969), "That the amount of food available sets the ultimate limit to the growth of all animal and human populations cannot be disputed. But this apparently self-evident proposition only holds good in a very rough way over a long period. The popular Malthusian notion that the number surviving from year to year is determined by the current supply of food, with the excess dying from starvation, is no longer supported by any student of natural population." Utilizing many animal population studies, including those of the lemmings perennially used by Malthusians, Stott demonstrates that other built-in population limiting factors occur that refute the Malthusian hypothesis,

such as decreased viability of the young and infertility, even when food is available. There is evidence that human populations function similarly, according to Stott, hence the Malthusian catastrophe is "unlikely to occur," and will be avoided by complex limiting factors if not by conscious human intervention. In any case, the toxic contamination of human beings appears to be laying the basis for a population decline in the ugliest of terms.

The Malthusian might argue that while increased infertility and inviolability of offspring is occurring among humans,



medical technology is keeping people alive that would have died under natural conditions. They are certainly correct on this score, but they have missed the point. We must resist the medicalization of our lives because it is undermining our humanity with its insane premise to overcome all death and disease. We are going to have to relearn how to live with death, which means letting people die that technology keeps alive, if we are to avoid being drawn into a deepening technological control of life. Medicalization and its promise of overcoming death leads directly to bioengineering and the undermining and restructuring of human beings, which will bring us either to medico-technological catastrophe which wipes everything out, or an engineered *Brave New World*. Furthermore, the medical industry is itself a tremendous polluter, as the recent controversy over the low level radiation land fill to be constructed in Michigan attests. An enormous landfill must be built to store radioactive wastes—many of them medically-generated—for several hundred years. So we see the irony of medical nuclear technology, used to cure diseases like cancer (when, in fact, little progress has been made on any of these fronts anyway) causing cancer, birth defects and so on as it becomes a mountain of toxic residue. This must stop; with

it, of course, will end certain short-term medical benefits (and a lot of medical exploitation of sick people and medically-induced disease, as well). The few short-term benefits that medical high technology bring are outweighed by its long-term deleterious effects on nature and human health. The death rate may rise, including among infants, as this shifts occurs, which would work with other factors to bring down population, but this is still not at all a confirmation of the Malthusian response that there are too many people now on earth because of this or other causes. This discussion demands more attention than a footnote: I am only raising the issue, not proposing to identify the exact point to which medicalization must be dismantled.

As an element of a rightward shift among some university circles, Malthusianism could be dusted off and relegitimized by scientists, but presently one can at least see that the population question, even among animal populations, is not clear-cut, and that there are still many differences of interpretation. Wrong notes that the decline in the rate of growth in the developed world severely undermines Malthusianism, and adds, "The natural sciences contribute significantly to the study of population. But the main causes of population trends, and the consequences of them that arouse great interest, are social." While an unlimited growth in population is indisputably a cause of human suffering, Wrong argues, "Malthus' view of human nature was that of a biological determinist."

⁴Bill McCormick argues in the August 1986 *Earth First!*, in a article, "Towards an Integrated Approach to Population and Justice," that "a dual approach" to population must be taken, reversing population trends while fighting economic injustice. Yet his argument rests on an attack of Frances Moor Lappe's and Joseph Collins' *Food First*, which demonstrates that only a struggle for economic justice will be effective in stabilizing populations. McCormick's approach starts from the assumption that "any modern social problem" must be considered by also "considering population density as a serious factor, not an insignificant one..."

Nowhere does he refute their argument that population density is not a factor in present starvation (many starving countries have relatively low population densities, while countries with greater densities are self-sufficient or potentially self-sufficient) or that present hunger is not caused by overpopulation. While he agrees that a struggle for justice is key, his solution is a homily that "we" start having fewer children. In "Earth First versus Food First," in the Summer 1987 *Kick It Over* (P.O. Box 5811, Station A, Toronto, Ontario M5W 1P2 Canada), he repeats his argument, noting that the current U.S. position since Reaganism follows the "resourceful earth" hypothesis of Julian Simon and Herman Kahn that is hostile to birth control policies because, it argues, "continuous growth is good for the planet." Actually, while "Reagan Era" reactionaries do oppose birth control and abortion rights in the Third World with absurd economic, technocratic and moralistic arguments, they are actually a variant of modern Malthusianism themselves (Malthus also opposed birth control as immoral), since their arguments are linked to the opposition to social welfare programs as well, based on arguments about the resolution of population and development crises by "free market" capitalist economics. For a critique of neoconservative Malthusians that still suffers from a liberal technofix perspective on the problem of hunger, see "Malthus Then and Now," by John L. Hess, in the April 18, 1987 issue of *The Nation*. Jonathan Kiebertson's article, "Too Many People?" in the June 26, 1986 *New York Review of Books*, also treats

some recent neoconservative population arguments. He notes as well that in many poor countries, "policies to alter reproductive behavior do not work well." While many factors may be involved, a central factor appears to be that "people do not wish to change their decisions to have many children." Clearly, social factors, many of them discussed in great detail by Lappe and Collins, underlie such decisions, so arguments like McCormick's are little better than sermons—sermons that tend to affirm the Malthusian legitimization of starvation even as they argue for social justice.

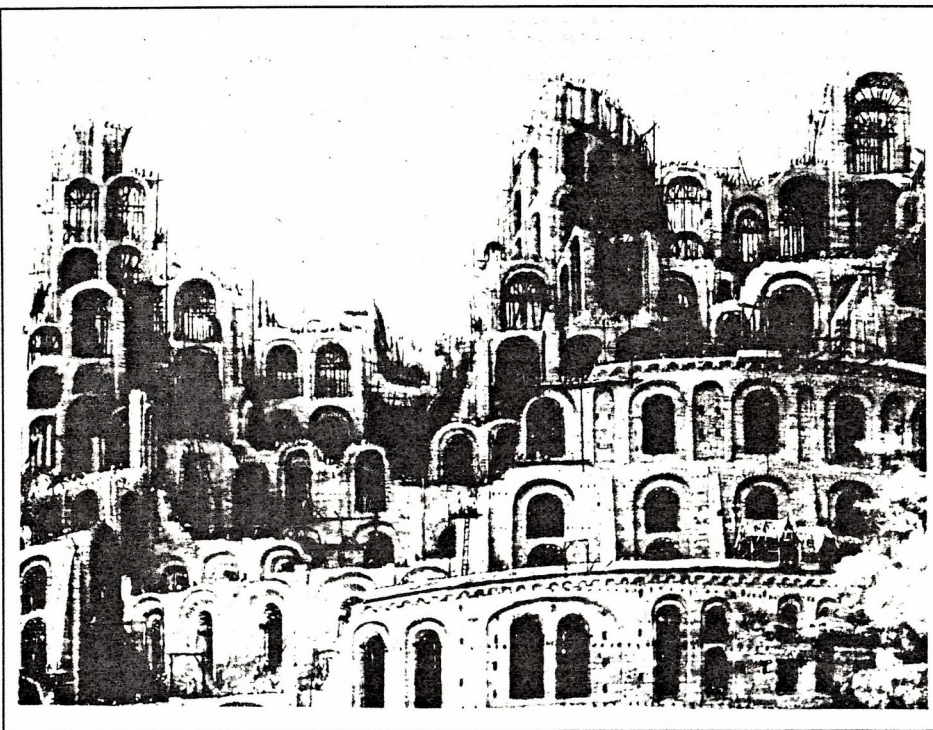
⁵For example William Vogt's 1948 *Road to Survival*, which called for strict population controls since there would be no time, as some argued, for populations to stabilize on their own. Why "ship food to keep alive ten million Indians and Chinese this year, so that fifty million may die five years hence," he mused. "China quite literally cannot feed more people...There can be no way out. These men and women, boys and girls, must starve as tragic sacrifices on the twin altars of uncontrolled human reproduction and uncontrolled abuse of the land's resources."

This same kind of argument was advanced by another ecological writer, John Stewart Collis, in *The Triumph of the Tree* (1954). This eminently civilized biocentric thinker writes of the "dread subject, this of population," that "In 1770 the vastly overpopulated continent of India was the victim of a famine in which ten million people died. That was excellent—as seen from the viewpoint of the animals...But our approach is so extraordinary. We really do seem to think that human beings should be exempt from natural laws."

⁶Naturalist Gary Paul Nabhan relates some examples in an interview in the July/August 1986 issue of the Colorado literary magazine, the *Bloomsbury Review*, describing the gathering of "sandfood" (a dune plant endemic to the delta of the Colorado River) by the Sand Papago Indians. This human "takeover" reflects a natural interaction which played a crucial role in the germination of the plant; in fact as gathering has declined, so have the plant's numbers. Another example is the parsnip of the Northwest: "The way it was gathered actually increased its vegetative propagation." This perspective is similar to Kropotkin's critique in *Mutual Aid*, of nineteenth century ideology and to many of the writings of renowned American naturalist Carl O. Sauer, who posed "ecologic equilibrium" as an alternative to the Malthusian proposition which, as he argued, has never been proven. (See his *Selected Essays: 1963-1975*, from the Turtle Island Foundation, 1981.)

⁷In response to the suggestion that his recommendations might be racist, he counters with an example of Japanese-Americans trying to stop immigration to the Hawaiian islands because of the severe limitations on land. This argument repulsed me personally, for I have spent much time in the islands, and have seen with my own eyes what the private property so hallowed in Hardin's view has done. As if it were abstractly a population question there, and not the runaway tourism development and the agroindustrial contamination that are Hawaii's problems. Hardin's article is "Lifeboat Ethics: The Case Against Helping the Poor," in *Psychology Today*, September 1974.

⁸Actually, a tiny slice of my friendly cover letter was printed, where I took issue with Foreman's offhand comment in a previous issue that Bookchin "would do well to get out of his stuffy libraries and encounter the wilderness," calling it an irrelevant and unjust personal attack. Foreman printed this one remark, responding that his comment was "a fundamental critique of Bookchin and anyone else who relies excessively on scholarship instead of direct wilderness experience for wisdom."

Bruegel, detail from *The Tower of Babel*

same positivist-scientific religion that has led the western world to the technological impasse it presently faces. Perhaps it was beyond the scope of a book which focussed on discrediting the myths of world hunger, but industrialization and the industrialization of culture, from a social as well as an ecological point of view are as serious as any other faced in the Third World must not follow the European or U.S. or socialist bloc models for industrialization. As Rudolf Bahro writes in *Socialism and Survival*, "On a world scale industrialization cannot be achieved any longer," since the earth's natural limits will not allow the growing world population to live like the current North American middle class. "And at the national level industrialization can no longer solve any problems of general interest. As has been shown in the last decade—the so-called decade of development—industrialization will only increase the sum of absolute impoverishment. The conclusion is to disengage, not for a better industrialization, but for a different type of civilization..." What should "the wretched of the earth...direct themselves towards?" Bahro asks. "Shouldn't the inhabitants of the *ranchos* organize for something very similar to the Old Testament exodus from Egypt: an outbreak back to the countryside?" The monster we face, therefore, is not simply

plunder and inequitable distribution. "The monster is our industrial system, our industrial way of life itself." (*Socialism and Survival*, Heretic Books, 1982.)

¹¹Harrison comments that if one were to consider the idea of *reparations* to the Third World for exploitation and damage done, the total "would probably be astronomical." To give an idea, he mentions Chile. There, under the government of Salvador Allende, economists, deciding on compensation costs that would be paid to multinational corporations for nationalizing copper holdings, "estimated that the companies had made excess profits of \$774 million and that far from having a right to any compensation, the companies actually owed Chile \$378 million." Of course, the United States quickly put an end to this kind of economic speculation.

¹²Actually, multinational corporations are attempting to shift the global supermarket into the Third World as well. India, for example, has a sizeable middle class and modern economy, perhaps with as many as 50 million people "who can consume on the level with most Americans and Western Europeans," according to one corporate advisor quoted by Lappe and Collins. Many multinationals are rapidly buying out and wrecking local food producing concerns and pushing their high energy-consuming, less nutritious products on the Third World. The

distribution of food within Third World countries is as uneven as the discrepancy between them and the industrialized nations, and it is getting worse, as the figures in Harrison's book show.

¹³In Costa Rica, beef production nearly quadrupled between 1960 and 1980, but local consumption declined by almost 40 percent. "Guatemala and Honduras followed the same pattern," writes Albert L. Huebner. "So did Nicaragua until 1979, when the Somoza dictatorship was overthrown. Under that plundering regime, beef production increased threefold after 1960, but beef exports increased nearly six-fold. The Somoza family owned one-fourth of the country's farmland, as well as six beef-importing companies in Miami." (See "World Hunger Myths: Taking Food From the Poor's Mouths," Albert L. Huebner, *The Nation*, June 22, 1985.) In light of such looting, it should become clearer, even to the dimmest deep ecologist one would hope, why nationalist regimes that cease to serve as simple conduits for massive U.S. corporate exploitation come under such powerful attack—Guatemala in 1954, Chile in 1973, and now Nicaragua, to name just a few. Ironically, in contrast to Dave Foreman's paranoid desire to protect "the resources we have" in the U.S. from famished Latin Americans, the State Department philosophy since the 1950's has been to rely on various police states and to hold back "nationalistic regimes" that might be more responsive to "increasing popular demand for immediate improvement in the low living standards of the masses," in order to "protect our resources"—in their countries! Hence the current genocidal war against Central America. (See "The Scandals of 1986," by Noam Chomsky, in the Spring/Summer 1987 *Our Generation*. Also his *Turning the Tide: U.S. Intervention in Central America and the Struggle for Peace*, South End Press, 1985 which should be read by every deep ecologist.)

Despite many informative articles, and much activity in behalf of rainforests, the connection between human suffering

and habitat destruction is rarely made in *Earth First!* For information on rainforests write the Rainforest Action Network, 300 Broadway, Suite 28, San Francisco, CA 94133. *The World Rainforest Report* appears regularly as a supplement in *Earth First!*, but has a somewhat different perspective, as far as I can tell, on the population question. A recent supplement contains an article on deforestation in the Philippines which stresses that while population pressure "has been the common scapegoat for many ills in developing countries," and while such pressure "will have a direct impact on forest destruction in the Philippines," it is poverty that underlies the problem. The way to promote smaller families, the author argues, is "to provide livelihoods allowing for a life of dignity." Despite serious population increase, "existing sources would have sufficed" in many situations "had there been equitable distribution." He gives as an example the island of Palawan, where the upland forests are being destroyed by poor farmers while the lowlands, held by absentee landlords, sit idle.

¹⁴This is not the image of world hunger held by most North Americans. Rather, the U.S. is seen as the "breadbasket of the world," feeding the poor nations and keeping them from even more severe misery than they are currently undergoing. "The truth," writes Huebner in the article cited above, "is quite different." In 1978, for example, "a representative year between periods of famine, most U.S. agricultural exports went to well-fed nations, not to those where malnutrition is pervasive. And for all the importance placed on breadbaskets, only one fifth of the grain in international trade goes to less-developed countries." If we look at protein deficiency, which, according to world hunger analyst George Borgstrom, "must be regarded as the chief nutritional deficiency of the world," protein is flowing from the poor to the rich nations. "Rather than the rich feeding the poor," writes Huebner, "the poor feed the rich."

